

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 09/695,140

REMARKS

Claims 12-18 are pending in the present application. As will be discussed below, Claims 1-11 have been cancelled and Claims 12-18 have been amended. No new matter has been added. Accordingly, entry of the present Amendment is requested.

Referring to page 2 of the Office Action, Claims 1-18 have been rejected under 35 U.S.C. § 112, second paragraph, as assertedly being indefinite.

It is indicated that the units "dg/mm" are not proper units for a melt index.

In response, Applicants note that, as mentioned above, Claims 1-11 have been cancelled. In the amendment to Claim 12, the proper units ("dg/min") have been utilized. Accordingly, withdrawal of this rejection is requested.

Claims 1-8 have been rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 3,404,134 to Rees and GB 1113409. Additionally, Claims 1-11 have been rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103 as obvious over U.S. Patent No. 3,959,539 to Waggoner).

As noted above, and without admitting that these rejections are correct, Claims 1-11 have been cancelled. Accordingly, withdrawal of these rejections is requested.

Claims 1-18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,526,375 to Nakade or U.S. Patent No. 4,999,404 to Matsuki in view of U.S. Patent No. 5,306,706 to Sullivan.

Both Nakade and Matsuki are relied upon to teach the production of golf ball materials by further neutralizing ionomers with additional metal. It is acknowledged that neither Nakade

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nor Matsuki suggests the use of metal stearates, although both patents are relied upon as suggesting the use of fillers, lubricants, *etc.* However, it is asserted that metal stearates are known to improve melt flow, cost, *etc.* of ionomeric golf ball materials. Column 5 of Sullivan, lines 45-57, are referred to in support of this assertion. In view of the foregoing, it is concluded that "it would have been obvious to add a metal stearate to the Nakade/Matsuki compositions for the expected advantages."

Applicants respectfully traverse this rejection for the following reasons.

The claimed invention is directed to golf balls wherein the component (A1) and the component (A2) include a three-component ionomer of an olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer. Applicants have discovered that this provides outstanding rebound.

Nakade and Matsuki disclose only two-component ionomer. Nakade and Matsuki do not disclose a three-component ionomer of an olefin-unsaturated carboxylic acid-unsaturated carboxylate copolymer, as presently claimed.

Sullivan discloses a golf ball material in which the ionomeric resins and the fatty acid salts are blended. The material of Sullivan substantially corresponds to Comparative Example 2 of the present specification. In this regard, Applicants note that the golf ball of Comparative Example 2 exhibited inferior rebound. Thus, Applicants respectfully submit that Sullivan fails to teach golf balls as presently claimed and the same would not have been *prima facie* obvious from Sullivan.

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In view of the foregoing, Applicants respectfully submit that the present claimed invention as defined by amended Claims 12, 13 and 16 would not have been *prima facie* obvious from the cited prior art. Accordingly, withdrawal of this rejection is requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 1-11 are canceled.

The claims are amended as follows:

12. A one-piece golf ball made from [the] a golf ball material [according to any one of claims 1 to 11] comprising a heated mixture having a melt index of at least 1.0 dg/min which is composed of:

(A) 100 parts by weight of a base resin comprising one or a mixture of

(A1) an olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, or both of an olefin-unsaturated carboxylic acid random copolymer and an olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, and

(A2) a metal ion-neutralized olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, or both of a metal ion-neutralized olefin-unsaturated carboxylic acid random copolymer and a metal ion-neutralized olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer;

(B) 5 to 80 parts by weight of a fatty acid or fatty acid derivative having a molecular weight of at least 280; and

(C) 0.1 to 10 parts by weight of a basic inorganic metal compound capable of neutralizing acidic groups in components A and B.

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13. A solid golf ball comprising a solid core of at least one layer and a cover of at least one layer enclosing the solid core, wherein at least one layer of the solid core or the cover is made of [the] a golf ball material [according to any one of claims 1 to 11] comprising a heated mixture having a melt index of at least 1.0 dg/min which is composed of:

(A) 100 parts by weight of a base resin comprising one or a mixture of

(Al) an olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, or both of an olefin-unsaturated carboxylic acid random copolymer and an olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, and

(A2) a metal ion-neutralized olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, or both of a metal ion-neutralized olefin-unsaturated carboxylic acid random copolymer and a metal ion-neutralized olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer;

(B) 5 to 80 parts by weight of a fatty acid or fatty acid derivative having a molecular weight of at least 280; and

(C) 0.1 to 10 parts by weight of a basic inorganic metal compound capable of neutralizing acidic groups in components A and B.

14. The solid golf ball of claim 13 comprising a one-layer cover enclosing the solid core, wherein the cover is made of the golf ball material [according to any one of claims 1 to 11].

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15. The solid golf ball of claim 13 comprising a cover of at least two layers enclosing the solid core, wherein at least one inner cover layer other than the outermost cover layer is made of the golf ball material [according to any one of claims 1 to 11].

16. A thread-wound golf ball comprising:

a thread-wound core composed of a solid center of at least one layer or a liquid center made of a liquid-filled center envelope, about which solid or liquid center has been wound a rubber thread, and

a cover of at least one layer which encloses the thread-wound core;

wherein the solid center or at least one layer of the cover is made of [the] a golf ball material [according to any one of claims 1 to 11] comprising a heated mixture having a melt index of at least 1.0 dg/min which is composed of:

(A) 100 parts by weight of a base resin comprising one or a mixture of

(A1) an olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, or both of an olefin-unsaturated carboxylic acid random copolymer and an olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, and

(A2) a metal ion-neutralized olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer, or both of a metal ion-neutralized olefin-unsaturated carboxylic acid random copolymer and a metal ion-neutralized olefin-unsaturated carboxylic acid-unsaturated carboxylate random copolymer;

(B) 5 to 80 parts by weight of a fatty acid or fatty acid derivative having a molecular weight of at least 280; and

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(C) 0.1 to 10 parts by weight of a basic inorganic metal compound capable of neutralizing acidic groups in components A and B.

17. The thread-wound golf ball of claim 16, wherein the thread-wound core is enclosed within a one-layer cover made of the golf ball material [according to any one of claims 1 to 11].

18. The thread-wound golf ball of claim 16, wherein the thread-wound core is enclosed within a cover having at least two layers, of which at least one inner layer other than the outermost layer is made of the golf ball material [according to any one of claims 1 to 11].